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Yamashita et al. (43) Pub. Date: **Dec. 20, 2001**(54) **OPTICAL DEVICE FOR USE IN DETECTING
THE WAVELENGTH AND INTENSITY OF
LIGHT****Publication Classification**(51) Int. Cl.⁷ G02B 6/26

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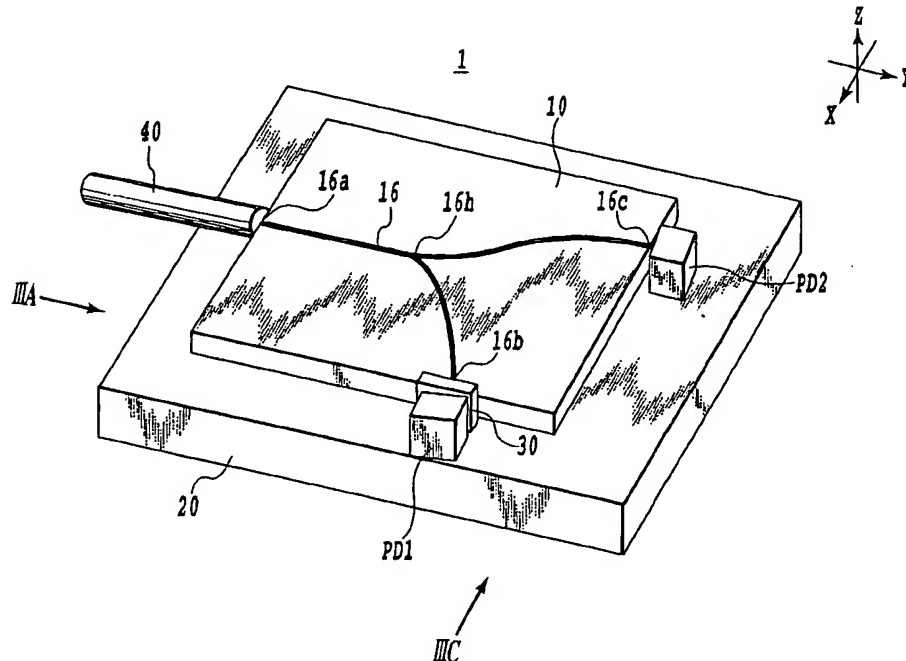
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(57) **ABSTRACT**

An optical device capable of detecting the intensity and wavelength of light from a light source with a high level of precision, and an optical module incorporating the optical device. The optical device has a planar lightwave circuit having a Y-branched core, a silicon substrate, a filter block, an optical fiber, and a first and a second photodiode. The end portion on the input side of the core is connected to the optical fiber. One end portion on the output side of the core is connected to the filter block, and the other on the same side is to the second photodiode. The light is divided at a predetermined ratio at the Y-branching portion. One of the branched light is sent through the filter block to be input to the first photodiode, and the other branched light is directly input to the second photodiode.



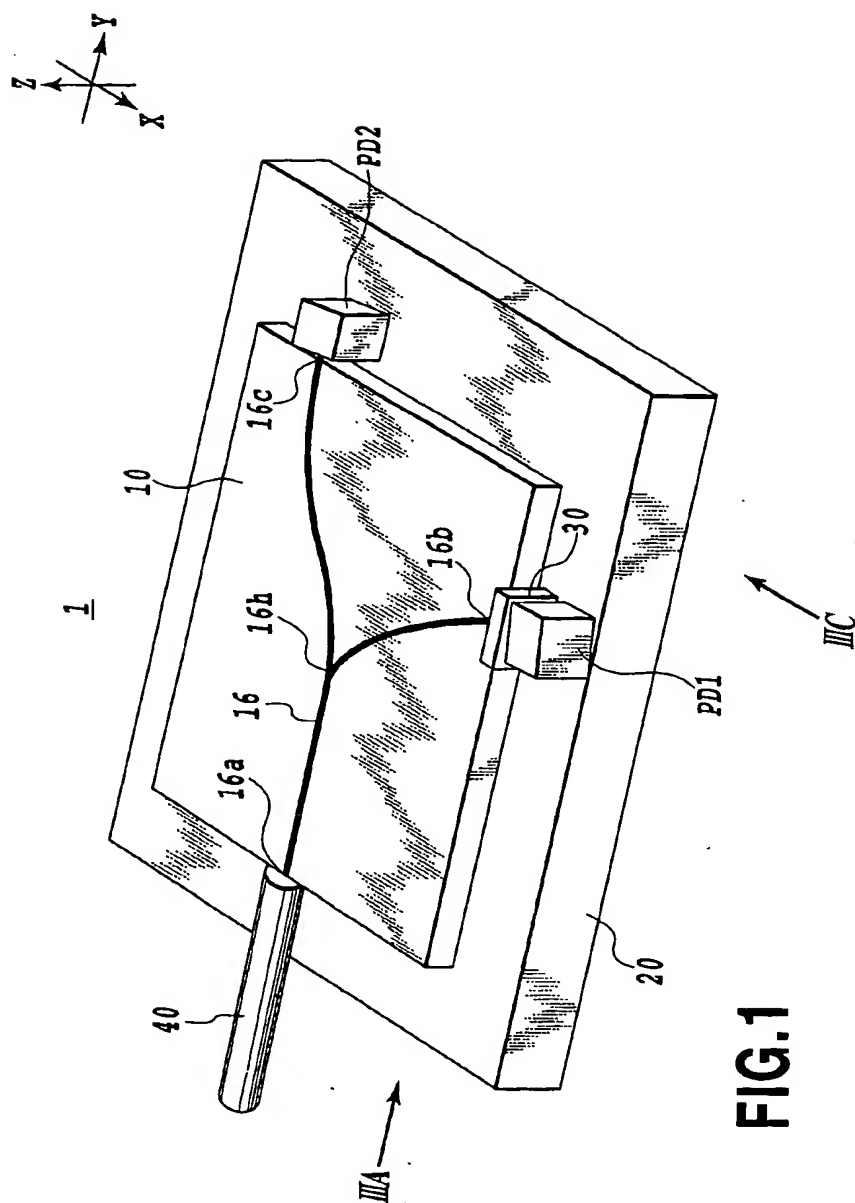


FIG. 1